

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Currently amended) A computer memory structure comprising:  
a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of a managed product, including:  
a key field; and  
a setting object pointer attribute.
2. (Original) The computer memory structure of Claim 1 wherein said key field comprises a name field.
3. (Original) The computer memory structure of Claim 1 wherein said configuration object further comprises:  
a sequence name field.
4. (Original) The computer memory structure of Claim 2 wherein said configuration object further comprises:  
a sequence name field.
5. (Original) The computer memory structure of Claim 4 wherein a first value is stored in said name field and a second value is stored in said sequence name field and further wherein said first and second values are a same value.
6. (Original) The computer memory structure of Claim 1 wherein said configuration object further comprises:

a sequence revision field.

7. (Original) The computer memory structure of Claim 6 wherein a timestamp for said configuration object is stored in said sequence revision field.

8. (Original) The computer memory structure of Claim 1 further comprising:

a setting object wherein said setting object is addressed by a pointer of said setting object pointer attribute.

9. (Original) The computer memory structure of Claim 8 wherein said setting object further comprises:  
a key field.

10. (Original) The computer memory structure of Claim 8 wherein said setting object further comprises:  
a setting data field.

11. (Original) The computer memory structure of Claim 10 wherein said setting data field comprises a setting text field.

12. (Original) The computer memory structure of Claim 9 wherein said key field comprises a setting identifier field.

13. (Original) The computer memory structure of Claim 8 wherein said setting object further comprises:  
a sequence name field.

14. (Original) The computer memory structure of Claim 12 wherein said setting object further comprises:  
a sequence name field.

15. (Original) The computer memory structure of Claim 14 wherein a first value is stored in said sequence identifier field and a second value is stored in said sequence name field and further wherein said first and second values are a same value.

16. (Original) The computer memory structure of Claim 8 wherein said setting object further comprises:  
a sequence revision field.

17. (Original) The computer memory structure of Claim 16 wherein a timestamp for said setting object is stored in said sequence revision field.

18. (Original) The computer memory structure of Claim 1 wherein said configuration object further comprises:

a parent configuration object pointer attribute wherein upon said parent configuration object pointer attribute including a pointer to another configuration object, said configuration object is a child configuration object.

19. (Original) The computer memory structure of Claim 18 wherein said pointer to another configuration object comprises a distinguished name pointer.

20. (Original) The computer memory structure of Claim 8 wherein said pointer stored in said setting object pointer attribute is a distinguished name pointer.

21. (Currently amended) A computer memory structure comprising:

a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of a managed product, comprising:

a name field, wherein said name field is a key field for said configuration object;  
a sequence name field; and  
a sequence revision field.

22. (Original) The computer memory structure of Claim 21 wherein said configuration object further comprises:

a pointer attribute for a pointer to a setting object.

23. (Original) The computer memory structure of Claim 21 wherein a first value is stored in said name field and a second value is stored in said sequence name field and further wherein said first and second values are a same value.

24. (Original) The computer memory structure of Claim 21 wherein a first value is stored in said name field and a second value is stored in said sequence name field and further wherein said first value is said second value combined with a value in said sequence revision field.

25. (Original) The computer memory structure of Claim 21 wherein said configuration object further comprises:

a pointer attribute for a pointer to a parent configuration object.

26. (Currently amended) A computer memory structure comprising:

a setting object, said setting object including data for a setting for a software feature of a managed product, comprising:  
a setting identifier field, wherein said setting

identifier field is a key field for said setting object;

a sequence name field;

a sequence revision field; and

a setting text field.

27. (Original) The computer memory structure of Claim 26 wherein a first value is stored in said sequence identifier field and a second value is stored in said sequence name field and further wherein said first and second values are a same value.

28. (Original) The computer memory structure of Claim 26 wherein a timestamp for said setting object is stored in said sequence revision field.

29. (Currently amended) A computer implemented method comprising:

specifying a configuration for a managed product using a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of said managed product; and

representing a modification to said configuration for said managed product using a derived configuration object of said configuration object.

30. (Currently amended) The computer implemented method of Claim 29 wherein said configuration object and said derived configuration object comprise a configuration object inheritance chain.

31. (Currently amended) The computer implemented method of Claim 30 further comprising:

processing said configuration object inheritance chain to obtain an effective configuration for said managed product.

32. (Currently amended) The computer implemented method of Claim 31 wherein said processing said configuration object inheritance chain comprises:

using a parent-child inheritance merge process.

33. (Currently amended) A computer implemented method comprising:

using a string in a setting object to specify a setting for a managed product; and

linking said setting object to a first configuration object for said managed product, said first configuration object representing a certain behavior or desired functional state for a software feature of said managed product.

34. (Currently amended) The computer implemented method of Claim 33 further comprising:

generating a second configuration object for said managed product.

35. (Currently amended) The computer implemented method of Claim 34 wherein said first configuration object comprises:

a first memory structure comprising:

a first name field storing a name wherein said name is a key for said first configuration object; and

a first sequence revision field storing a first timestamp for said configuration object.

36. (Currently amended) The computer implemented method of Claim 35 wherein said generating a second configuration object further comprising:

creating a second memory structure having a second name field and a second sequence revision field.

37. (Currently amended) The computer implemented method of Claim 36 wherein said generating a second configuration object further comprises:

copying said first timestamp from said first sequence revision field to said second sequence revision field.

38. (Currently amended) The computer implemented method of Claim 36 wherein said generating a second configuration object further comprises:

storing a second name in said second name field wherein said second name field comprises a combination of said name and said first time stamp.

39. (Currently amended) The computer implemented method of Claim 35 further comprises:

overwriting said first timestamp in said first sequence revision field with a second timestamp.

40. (Currently amended) The computer implemented method of Claim 38 further comprises:

overwriting said first timestamp in said first sequence revision field with a second timestamp.

41. (Currently amended) The computer implemented method of Claim 33 wherein using said string comprises using an extensible markup language string.

42. (Currently amended) The computer implemented method of Claim 41 wherein said using said string further comprises:

using a name attribute with a namespecifier in a start tag in said string.

43. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends a literal name to a name of said start tag.

44. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends current element text to a name of said start tag.

45. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends a current element attribute value to a name of said start tag.

46. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends a name of a subelement tag to a name of said start tag.

47. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends text of a subelement to a name of said start tag.

48. (Currently amended) The computer implemented method of Claim 42 where said namespecifier appends a subelement attribute value to a name of said start tag.

49. (Currently amended) A computer implemented method comprising:

generating an effective configuration for a managed product from a configuration object inheritance chain, said configuration object inheritance chain comprising:

a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of said managed product; and

a derived configuration object.



50. (Currently amended) The computer implemented method of Claim 49 wherein said generating an effective configuration comprises:

getting a mark-up language string for a most-derived configuration object.

51. (Currently amended) The computer implemented method of Claim 50 wherein said generating an effective configuration further comprises:

converting said mark-up language string for said most-derived configuration object to a derived tree structure having nodes wherein a plurality of nodes in said derived tree structure include collision detection names.

52. (Currently amended) The computer implemented method of Claim 51 wherein a collision detection name for a node in said plurality of nodes is a name of a start tag when said start tag does not include a name attribute.

53. (Currently amended) The computer implemented method of Claim 51 wherein a collision detection name for a node in said plurality of nodes is combination of a name of a start tag and a string determined by a namespecifier when said start tag includes a name attribute with said namespecifier.

54. (Currently amended) The computer implemented method of Claim 51 wherein said generating an effective configuration comprises:

getting a mark-up language string for a parent configuration object of said most-derived configuration object.

55. (Currently amended) The computer implemented method

of Claim 54 wherein said generating an effective configuration further comprises:

converting said mark-up language string for said parent configuration object to a base tree structure having nodes wherein a plurality of nodes in said base tree structure include collision detection names.

56. (Currently amended) The computer implemented method of Claim 55 wherein said generating an effective configuration further comprises:

combining said derived tree structure and said base tree structure, by resolving at least one collision between a node in the derived tree structure having a collision detection name and a node in the base tree structure having said collision detection name, to form a merged tree structure.

57. (Currently amended) The computer implemented method of Claim 56 wherein resolving at least one collision between a node in the derived tree structure having a collision detection name and a node in the base tree structure having said collision detection name further comprises:

merging said nodes to form a node of said merged tree when said nodes have child nodes.

58. (Currently amended) The computer implemented method of Claim 56 wherein resolving at least one collision between a node in the derived tree structure having a collision detection name and a node in the base tree structure having said collision detection name further comprises:

copying said node in the derived tree structure to said merged tree when said nodes are leaf nodes.

59. (Currently amended) The computer implemented method of Claim 56 wherein resolving at least one collision between a

node in the derived tree structure having a collision detection name and a node in the base tree structure having said collision detection name further comprises:

selecting a combination of said nodes to form a node of said merged tree based upon a value of a collision resolution mode attribute in a start tag for an element corresponding to one of said nodes.

60. (Currently amended) The computer implemented method Claim 59 where said value of said collision resolution mode attribute is merge.

61. (Currently amended) The computer implemented method Claim 59 where said value of said collision resolution mode attribute is use base.

62. (Currently amended) The computer implemented method Claim 59 where said value of said collision resolution mode attribute is use derived.

63. (Currently amended) The computer implemented method Claim 59 where said value of said collision resolution mode attribute is accumulate.

64. (Currently amended) The computer implemented method of Claim 50 wherein said getting a mark-up language string for a most-derived configuration object includes:

collapsing sibling elements with identical values of a name attribute into a single element.

65. (Currently amended) A computer implemented method comprising:

using an extensible markup language string in a setting object to specify a setting for a managed product, said setting

object including data for a setting for a software feature of said managed product; and

including a name attribute in at least one start tag in a XML string.

66. (Currently amended) The computer implemented method of Claim 65 further comprising:

including a collision resolution mode attribute for at least one start tag in said XML string.

67. (Currently amended) The computer implemented method Claim 66 where a value of said collision resolution mode attribute is merge.

68. (Currently amended) The computer implemented method Claim 66 where a value of said collision resolution mode attribute is use base.

69. (Currently amended) The computer implemented method Claim 66 where a value of said collision resolution mode attribute is use derived.

70. (Currently amended) The computer implemented method Claim 66 where a value of said collision resolution mode attribute is accumulate.

71. (Currently amended) The computer implemented method of Claim 65 wherein said name attribute includes a namespecifier.

72. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends a literal name to a name of said start tag.

73. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends current element text to a name of said start tag.

74. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends a current element attribute value to a name of said start tag.

75. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends a name of a subelement tag to a name of said start tag.

76. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends text of a subelement to a name of said start tag.

77. (Currently amended) The computer implemented method of Claim 71 where said namespecifier appends a subelement attribute value to a name of said start tag.

78. (Currently amended) A computer-program product comprising a computer-readable storage medium containing computer program code for a method comprising:

specifying a configuration for a managed product using a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of said managed product; and

representing a modification to said configuration for said managed product using a derived configuration object of said configuration object.

79. (Currently amended) A computer based structure comprising:

means for specifying a configuration for a managed product using a configuration object, said configuration object representing a certain behavior or desired functional state for a software feature of said managed product; and

means for representing a modification to said configuration for said managed product using a derived configuration object of said configuration object.

80. (Currently amended) A computer-program product comprising a computer-readable storage medium containing computer program code for a method comprising:

using a string in a setting object to specify a setting for a managed product; and

linking said setting object to a first configuration object for said managed product, said first configuration object representing a certain behavior or desired functional state for a software feature of said managed product.

81. (Currently amended) A computer based structure comprising:

means for using a string in a setting object to specify a setting for a managed product; and

means for linking said setting object to a first configuration object for said managed product, said first configuration object representing a certain behavior or desired functional state for a software feature of said managed product.

82. (Currently amended) A computer based structure comprising:

means for getting a mark-up language string for a most-derived configuration object; and

means for converting said mark-up language string for said most-derived configuration object to a derived tree structure

having nodes wherein a plurality of nodes in said derived tree structure include collision detection names.

83. (Currently amended) The computer based structure of Claim 82 further comprising:

means for getting a mark-up language string for a parent configuration object of said most-derived configuration object.

84. (Currently amended) The computer based structure of Claim 83 further comprising:

means for converting said mark-up language string for said parent configuration object to a base tree structure having nodes wherein a plurality of nodes in said base tree structure include collision detection names.

85. (Currently amended) The computer based structure of Claim 84 further comprising:

means for combining said derived tree structure and said base tree structure, by resolving at least one collision between a node in the derived tree structure having a collision detection name and a node in the base tree structure having said collision detection name, to form a merged tree structure.

86. (Currently amended) A computer-program product comprising a computer-readable storage medium containing computer program code for a method comprising:

using an extensible markup language string in a setting object to specify a setting for a managed product, said setting object including data for a setting for a software feature of said managed product; and

including a name attribute in at least one start tag in said XML string.